


SAFETY DATA SHEET

Section 1 - Identification

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|---|---|
| Product Identifier | CHEM-EEZ Heavy Duty Cleaner / Degreaser |
| Other means of identification | 1001 |
| Recommended use | Alkaline cleaner. |
| Recommended restrictions | For commercial and industrial use only. |
| Manufacturer / Importer / Supplier / Distributor Information | |
| Company Name | National Chemical Laboratories of PA, Inc. |
| Address | 401 N. 10th Street - Philadelphia, PA 19123 |
| Telephone | 1 (215) 922-1200 |
| Supplier Email | info@nclonline.com |
| Contact | CHEM-TEL |
| Emergency Phone | 1 (800) 255-3924 |

Section 2 - Hazard(s) Identification

SDS Hazards and Warnings are based on the undiluted product. Refer to diluted SDS for Ready-To-Use Hazards and Warnings.

| | | Category | Target Organ |
|--|--|----------|--------------|
| Physical Hazards | Not Classified | | |
| Health Hazards | Serious eye damage/eye irritation | 1 | |
| | Skin corrosion/irritation | 1 | |
| OSHA defined hazards | Not Classified. | | |
| Label Elements | | | |
| Hazard Symbol |  | | |
| Signal Word | Danger | | |
| Hazard statement | Causes severe skin burns and eye damage. | | |
| Precautionary statement | | | |
| Prevention | Do not breathe the mist or vapor. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. | | |
| Response | If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | | |
| Storage | Store locked up. | | |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. | | |
| Hazard(s) not otherwise classified (HNOC) | Not classified. | | |

Section 3 - Composition/Information on ingredients

| | | | |
|-----------------------------|--|-----------|-------|
| Mixture | | | |
| Hazardous Components | Ingredient Name | CAS # | % |
| | 2-Butoxyethanol | 111-76-2 | 1 - 5 |
| | Nonylphenol, ethoxylated | 9016-45-9 | 1 - 5 |
| | Sodium Hydroxide | 1310-73-2 | 1 - 5 |
| Composition Comments | All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. | | |

Section 4 - First-aid Measures

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| Inhalation | If respiratory irritation or distress occurs, remove victim to fresh air. If breathing is difficult, give oxygen. If breathing stops, apply artificial respiration. CONSULT A PHYSICIAN. |
| Skin contact | Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation persists. Wash contaminated clothing before reuse. |

SAFETY DATA SHEET

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| Eye contact | Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Check and remove contact lenses. Continue to rinse for at least 10 minutes. |
| Ingestion | Rinse mouth thoroughly with water. DO NOT induce vomiting. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than the hips to help prevent aspiration. Call a physician or poison control center immediately. |
| Most Important symptoms /effects, acute and delayed | Causes skin and eye burns. |
| Indication of immediate medical attention and special treatment | Treat symptomatically. |
| General Information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

Section 5 - Fire-fighting measures

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|--|---|
| Suitable extinguishing media | Carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog. |
| Unsuitable extinguishing media | Not available. |
| Specific hazards arising from the chemical | None known. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment /instructions | Move containers from fire area if you can do it without risk. Use water spray to keep fire-exposed containers cool. |
| General fire hazards | |
| Specific Methods | |

Section 6 - Accidental release measures

| | |
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| Personal precautions, protective equipment and emergency procedures. | Isolate area. Keep unnecessary personnel away. Use personal protection as recommended in Section 8 of the SDS. |
| Methods and materials for containment and cleaning up | SMALL SPILLAGE: Absorb spillage with suitable absorbent material. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water. LARGE SPILLS: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water. |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. |

Section 7 - Handling and storage

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|---|---|
| Precautions for safe handling | Do not get in eyes, on skin, or on clothing. Do not breathe mist or vapor. Do not taste or swallow. Use with adequate ventilation. Wash thoroughly after handling. Use Personal Protective Equipment recommended in section 8 of the SDS. |
| Conditions for safe storage, including any incompatibilities | Store away from incompatible materials. Keep container closed. |

Section 8 - Exposure control/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value | Form |
|----------------------------------|------|--------------------------------|------|
| 2-Butoxyethanol (CAS 111-76-2) | PEL | 240 mg/m ³ , 50 ppm | |
| Sodium Hydroxide (CAS 1310-73-2) | PEL | 2 mg/m ³ | |

US. ACGIH Threshold Limit Values

| Component | Type | Value | Form |
|----------------------------------|---------|---------------------|------|
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 20 ppm | |
| Sodium Hydroxide (CAS 1310-73-2) | Ceiling | 2 mg/m ³ | |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value | Form |
|----------------------------------|---------|------------------------------|------|
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 24 mg/m ³ , 5 ppm | |
| Sodium Hydroxide (CAS 1310-73-2) | Ceiling | 2 mg/m ³ | |

Biological limit values

US. ACGIH. BEIs. Biological Exposure Indices

| Components | Value | Determinate | Specimen | Sampling Time |
|--------------------------------|----------|--|---------------------|---------------|
| 2-Butoxyethanol (CAS 111-76-2) | 200 mg/g | Butoxyacetic acid (BAA), with hydrolysis | Creatinine in urine | * |

* - For sampling details, please see the source document.

Exposure guidelines Use personal protective equipment as required. Keep working clothes separately.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

Components Exposure

SAFETY DATA SHEET

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|---|---|
| Components | exposure |
| 2-Butoxyethanol (CAS 111-76-2) | Can be absorbed through the skin. |
| US.Minnesota Hazardous Substances List (Minn. Rules 5206.0400). | |
| Components | Exposure |
| 2-Butoxyethanol (CAS 111-76-2) | Skin designation applies. |
| US.NIOSH: Pocket Guide to Chemical Hazards | |
| Component | Exposure |
| 2-Butoxyethanol (CAS 111-76-2) | Can be absorbed through the skin. |
| US.OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.100) | |
| Components | Exposure |
| 2-Butoxyethanol (CAS 111-76-2) | Can be absorbed through the skin. |
| US.OSHA Table Z-1-A (29 CFR 1910.100) | |
| Components | Exposure |
| 2-Butoxyethanol (CAS 111-76-2) | Can be absorbed through the skin. |
| US.Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.) | |
| Components | Exposure |
| 2-Butoxyethanol (CAS 111-76-2) | Can be absorbed through the skin. |
| US.Tennessee. OELs Occupational Exposure Limkits, Table Z1A | |
| Components | Exposure |
| 2-Butoxyethanol (CAS 111-76-2) | Can be absorbed through the skin. |
| Appropriate engineering controls | Provide adequate ventilation and minimize the risk of inhalation of vapors and mists. Provide easy access to water supply and eye wash facilities. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Wear approved chemical safety goggles. |
| Skin protection | |
| Hand protection | Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier. |
| Other | Wear appropriate chemical resistant clothing. |
| Respiratory protection | Use a respirator when local exhaust or ventilation is not adequate to keep exposures below the OEL. In a confined space a supplied respirator may be required. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

Section 9 - Physical and chemical properties

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|---|-------------------------|
| Appearance | Clear. |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Purple. |
| Odor | Sassafras. |
| Odor threshold | Not available. |
| pH (Concentrate) | 13.3 |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | 212 °F (100 °C) |
| Flash point | > 212.0 °F (> 100.0 °C) |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Similar to water. |
| Vapor density | Similar to water. |
| Relative density | 1.04 ± 0.01 |
| Relative density temperature | 75 °F (23.89 °C) |
| Solubilities | 100 % Soluble. |
| Partition Coefficient n-octanol/water | Not available |

SAFETY DATA SHEET

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|---------------------------|------------------|
| Auto-ignition temperature | Not Available |
| Decomposition temperature | Not Available |
| Viscosity | < 10 cP |
| Viscosity Temperature | 75 °F (23.89 °C) |

Section 10 - Stability and reactivity

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|------------------------------------|--|
| Reactivity | The product is non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Stable at normal conditions. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to Avoid | Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous Decomposition Products | Carbon monoxide. Carbon dioxide. |

Section 11 - Toxicological information

Information on likely routes of exposure

| | |
|--------------|---|
| Ingestion | May be harmful if swallowed. |
| Inhalation | May cause burns in mucous membranes, throat, esophagus and stomach. |
| Skin contact | Causes skin burns. |
| Eye contact | Causes serious eye damage. |

| | |
|--|----------------------------|
| Symptoms related to the physical, chemical and toxicological characteristics | Causes skin and eye burns. |
|--|----------------------------|

Information on toxicological effects.

| | |
|----------------|------------------------------|
| Acute toxicity | May be harmful if swallowed. |
|----------------|------------------------------|

| Components | Level | Type | Code | Species | Results |
|--|-------|------------|------|---------|-----------------|
| 2-Butoxyethanol (CAS 111-76-2) | Acute | Dermal | LD50 | Rabbit | 400 mg/kg |
| | Acute | Inhalation | LC50 | Rat | 450 mg/l, 4 hrs |
| | Acute | Oral | LD50 | Rat | 560 mg/kg |
| Nonylphenol, ethoxylated (CAS 9016-45-9) | Acute | Oral | LD50 | Mouse | 4290 mg/kg, bw |
| Sodium Hydroxide (CAS 1310-73-2) | Acute | Oral | LD50 | Rabbit | 500 mg/kg |

| | |
|---------------------------|---|
| Skin corrosion/irritation | Causes skin burns. Causes serious eye damage. |
|---------------------------|---|

| | |
|------------------------------------|----------------------------|
| Serious eye damage/ eye irritation | Causes serious eye damage. |
|------------------------------------|----------------------------|

| | |
|---------------------------|-----------------|
| Respiratory sensitization | Not classified. |
|---------------------------|-----------------|

| | |
|--------------------|----------------|
| Skin sensitization | Not available. |
|--------------------|----------------|

| | |
|------------------------|-----------------|
| Germ cell mutagenicity | Not classified. |
|------------------------|-----------------|

| | |
|-----------------|-----------------|
| Carcinogenicity | Not classified. |
|-----------------|-----------------|

IARC Monographs. Overall Evaluation of Carcinogenicity

| Component | Result | Comment |
|--------------------------------|--------|---|
| 2-Butoxyethanol (CAS 111-76-2) | 3 | Not classifiable as to carcinogenicity to humans. |

| | |
|-----------------------|-----------------|
| Reproductive toxicity | Not classified. |
|-----------------------|-----------------|

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|--|-----------------|
| Specific target organ toxicity - single exposure | Not classified. |
|--|-----------------|

| | |
|--|-----------------|
| Specific target organ toxicity - repeated exposure | Not classified. |
|--|-----------------|

| | |
|-------------------|-----------------|
| Aspiration hazard | Not classified. |
|-------------------|-----------------|

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|-----------------|--|
| Chronic effects | |
|-----------------|--|

Further information

Section 12 - Ecological Information

| | |
|-------------|--|
| Ecotoxicity | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
|-------------|--|

| Components | Species | Test Results |
|-------------------------------------|---------|--------------------------------|
| Nonylphenol, ethoxylated, 9016-45-9 | | |
| Aquatic | | |
| EcoName | EcoCode | EcoSpecies |
| Crustacea | EC50 | Daphnia magna |
| | EC50 | Water flea (Daphnia magna) |
| Fish | LC50 | Bluegill (Lepomis macrochirus) |
| Aquatic | | |
| | | EcoTestResults |
| | | 65 mg/l, 48 hours |
| | | 12.2 mg/l, 48 hours |
| | | 1 - 1.8 mg/l 96 hours |

SAFETY DATA SHEET

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|--|---|
| Persistence and degradability | The product is expected to be biodegradable. |
| Bioaccumulative potential | Not known. |
| Partition coefficient n-octanol / water log (Kow) | |
| Components | Results |
| 2-Butoxyethanol (CAS 111-76-2) | 0.83 |
| Mobility in soil | Not available. |
| Mobility in general | The product is water soluble and may spread in water systems. |
| Other adverse effects | None known. |

Section 13 - Disposal considerations

| | |
|--|---|
| Disposal instructions | Dispose in accordance with applicable federal, state, and local regulations. |
| Local disposal regulations | Dispose of in accordance with local regulations. |
| Hazardous waste code | Waste codes should be assigned by the user based on the application for which the product was used. |
| Waste from residues / unused products | Dispose in accordance with all applicable regulations. |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

Section 14 - Transport information

DOT

| | |
|--------------------------------------|---|
| UN number | UN1824 |
| UN proper shipping name | Sodium hydroxide solution |
| Transport hazard class(es) | 8 |
| Subsidiary class(es) | |
| Packing group | II |
| Special precautions for users | Read safety instructions, SDS and emergency procedures before handling. |
| Labels required | 8 |
| Special provisions | B2, IB2, N34, T7, TP2 |
| Packaging exemption | 154 |
| Packaging non bulk | 202 |
| Packaging bulk | 242 |

IATA

| | |
|-------------------------------------|---|
| UN number | UN1824 |
| UN proper shipping name | Sodium hydroxide solution |
| Transport hazard class(es) | 8 |
| Subsidiary class(es) | |
| Packaging group | II |
| Environmental hazards | No. |
| Labels required | |
| ERG Code | 8L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

IMDG

| | |
|-------------------------------------|---|
| UN number | UN1824 |
| UN proper shipping name | SODIUM HYDROXIDE SOLUTION |
| Transport hazard class(es) | 8 |
| Subsidiary class(es) | |
| Packaging group | II |
| Environmental hazards | |
| Marine pollutant | No. |
| Labels required | |
| EmS | F-A, S-B |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

Transportation in bulk Not established.

according to Annex II of MARPOL 73/78 and IBC Code

General Information

Section 15 - Regulatory Information

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|---|--|
| US federal regulations | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
| TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D) | Not regulated. |

SAFETY DATA SHEET

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not on regulatory list.

CERCLA Hazardous Substance List (40 CFR 302.4)

| | |
|----------------------------------|--------|
| Components | Result |
| Sodium Hydroxide (CAS 1310-73-2) | LISTED |
| 2-Butoxyethanol (CAS 111-76-2) | LISTED |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

| | | |
|--------------------------|-------------------|-----|
| Hazard Categories | Immediate Hazard | Yes |
| | Delayed Hazard | No |
| | Fire Hazard | No |
| | Pressure Hazard | No |
| | Reactivity Hazard | No |

SARA 302 Extremely hazardous substance No
 SARA 311/312 Hazardous chemical Yes
 SARA 313 (TRI reporting)

| | | |
|-----------------|----------|----------|
| Chemical name | CAS # | % by wt. |
| 2-Butoxyethanol | 111-76-2 | 1 - 5 |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HSPs) List Not regulated.
 Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.
 Safe Drinking Water Act (SDWA) Not regulated.
 Food and Drug Administration (FDA) Not regulated.

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US.Massachusetts RTK - Substance List Components
 2-Butoxyethanol (CAS 111-76-2)
 Sodium Hydroxide (CAS 1310-73-2)

US.New Jersey Worker and Community Right-to-Know Act Components
 2-Butoxyethanol (CAS 111-76-2)
 Sodium Hydroxide (CAS 1310-73-2)

US.Pennsylvania RTK - Hazardous Substances Components
 2-Butoxyethanol (CAS 111-76-2)
 Sodium Hydroxide (CAS 1310-73-2)

US.Rhode Island RTK Components
 2-Butoxyethanol (CAS 111-76-2)
 Sodium Hydroxide (CAS 1310-73-2)

US - California Proposition 65 - Carcinogens Reproductive Toxicity (CRT): Listed substance Not Listed.

International Inventories

| Country(s) or region | Inventory Name | On Inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances | Yes |
| Unites States | Toxic Substances Control Act (TSCA) Inventory | Yes |
| Puerto Rico | | |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16 - Other information, including date of preparation or last version

Issue date 12/27/2012
 Revision date
 Version # 01
 Further information Not available.
 List of abbreviations
 References

SAFETY DATA SHEET

Disclaimer

The information contained herein was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond the manufacturer's control, it is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense arising from the product's improper use. No warranty, expressed or implied, regarding the product described herein shall be created by or inferred from any statement or omission in this SDS. Various government agencies may have specific regulations concerning the transportation, handling, storage, use or disposal of this product which may not be reflected in this SDS. The user should review these regulations to ensure full compliance.